



Društvo za zaštitu bilja Srbije
Plant Protection Society of Serbia

V KONGRES O ZAŠTITI BILJA
V Congress of Plant Protection

Zbornik rezimea
Book of Abstracts

Zlatibor
22 - 26. novembar 2004. godine

5.24. EFEKAT KASNOG TRETIRANJA OZIME PŠENICE FUNGICIDOM NA RAZVOJ *Puccinia triticina* I PRINOS GENOTIPOVA 2004. GODINE

Putnik-Delić Marina, Jerković Zoran, Jevtić Radivoje
Naučni institut za ratarstvo i povrtarstvo, Novi Sad

U ogledu postavljenom kod Rimskih Šančeva 2003. godine, ispitivano je dvanaest genotipova ozime pšenice. Setva je obavljena 22.10.2003. a žetva 06.07.2004. Parcelice (7m²) tretirane (T) su preparatom Folicur EC 250 (250 g/l tebukonazol+ 20% dodecilbenzosulfonska kiselina) 24.05. 2004. godine (5 cm³ preparata na 100 m²), bile su paralelno postavljene, a udaljene dva metra od netretiranih (K) posejanih istim genotipom. Očitavanja intenziteta zaraze su vršena 20.05., 02.06., 10.06 i 21.06 2004. godine. Na srednje kasnoj sorti Pobeda zabeležen je maksimalan intenzitet *Puccinia triticina* 50, *Erysiphe graminis* 25, a na parcelicama tretiranim fungicidom 20-30 i 10. Efekat tretiranja na prinos zrna navedene sorte je bio 7%, a kod po vremenu sazrevanja sličnoj ali nešto otpornijoj liniji prema prouzrokovaču lisne rdje NS 121/98 KV, 5%. Maksimalan efekat tretiranja na prinos kod *Triticum aestivum* ssp. *vulgare* u ogledu od 11 i 12%, zabeležen je na srednje ranim genotipovima NS 101/02 (8,89 prema 10,14 t/ha) i NS 204/02 (8,43 prema 9,43 t/ha), kod kojih je 10.06. na netretiranim parcelicama ostvaren intenzitet zaraze prouzrokovačem lisne rdje 30 uz potpun efekat primene fungicida. Kasnije, starenje i odumiranje listova (osnovni uzroci pseudo nekompletne rezistentnosti pšenice prema *P. triticina*), sprečilo je dalji razvoj parazita te 21.06. nisu ustanovljene razlike. Prosečan prinos zrna sa svih tretiranih parcelica posejanih s *Triticum aestivum* ssp. *vulgare* bio je 9,23, a netretiranih 8,79 t/ha (razlika 5 %). Najefektnije kasno tretiranje Folicurom EC 250 bilo je kod linije NS 2/03 KS (*Triticum aestivum* ssp. *compactum*), potencijalno izuzetno produženog trajanja lisne površine, a najosetljivije prema *Puccinia triticina*. Maksimalan intenzitet od 70 postignut je 21.06. i pored primene fungicida identično kao i na kontroli. Razlike od traga T : 30 K 02.06 i 10 : 50, 10.06 kao i redukovani razvoj prouzrokovača pepelnice (10 T : 30 K) bile su bitne za ostvarenje višeg prinosa na tretiranom usevu (3,48 K i 5,47 t/ha T, razlika 36%). Ukupno, niskom prinosu doprinelo je i poleganje.

Efekat tretiranja fungicidom na prinos i smanjenje maksimalnog intenziteta zaraze s *Puccinia triticina* bio je sortno specifičan.

5.24. EFFECT OF THE LATE TREATMENT BY FUNGICIDE ON LEAF RUST DEVELOPMENT OF *Puccinia triticina* AND YIELD OF THE WINTER WHEAT GENOTYPES IN 2004.

Putnik-Delic Marina, Jerkovic Zoran, Jevtic Radivoje
Institute of field and vegetable crops, Novi Sad

In the trial established on the Institutes experimental field located near Novi Sad, twelve winter wheat genotypes were investigated. Sowing was performed on 22.10. 2003. as harvesting on 06.07.2004. Parcels (7 m²) treated (T) with fungicide Folicur EC 250 (250 g/l tebukonazole + 20% dodecilbenzosulfonic acid) on 24.05.2004. (5 cm³ of the fungicide on 100 m²) were parallel with untreated (K) sown by same genotype two meters distanced. Estimation of the infection intensities was on 20.05. , 02.06. 10.06. and 21.06.2004. Middle late maturing variety Pobeda allowed the maximal intensity of *Puccinia triticina* 50, *Erysiphe graminis* 25 untreated and 20-30 and 10 treated. Effect on yield was in 7% increase. On by maturity similar, but little bit more resistant line NS 121/98 KV was five percent. Maximal increase of the yield 11 and 12%, caused by success full fungicide treatment of *Triticum aestivum ssp. vulgare* in trial, was on middle early lines NS 101&02 (8,89 to 10,14 t/ha) and NS 204&02 (8,43 to 9,43 t/ha), on which the attack of the *Puccinia triticina* was 30 (K) on 10.06. Later, the senescence of the leafs (main cause of the wheat pseudo incomplete resistance to *P. triticina*) stopped the development of the parasite. The average yield from all treated parcels was 9,23 and untreated 8,79 t/ha (5% difference). The most effective late treatment with Folicur EC-250 was on the line NS 203 KS (*Triticum aestivum ssp. compactum*), with very long leaf area duration and most susceptible to *Puccinia triticina*. Maximal intensity of the attack 70 on 21.06.. beside fungicide application, was same as on the control. Differences, from trace (T) to 30 (K) on 02.06. as 10 (T) to 50 (K) on 10.06 and the reduced development of powdery mildew 10 (T) to 30 (K) were essential for the yield increase (3,48 k and 5,47 t, difference 36%). The identical lodging on K and T parcels also decreased the yield.

Effect of the fungicide treatment on the yield and *Puccinia triticina* infection intensity decrease was genotype specific.